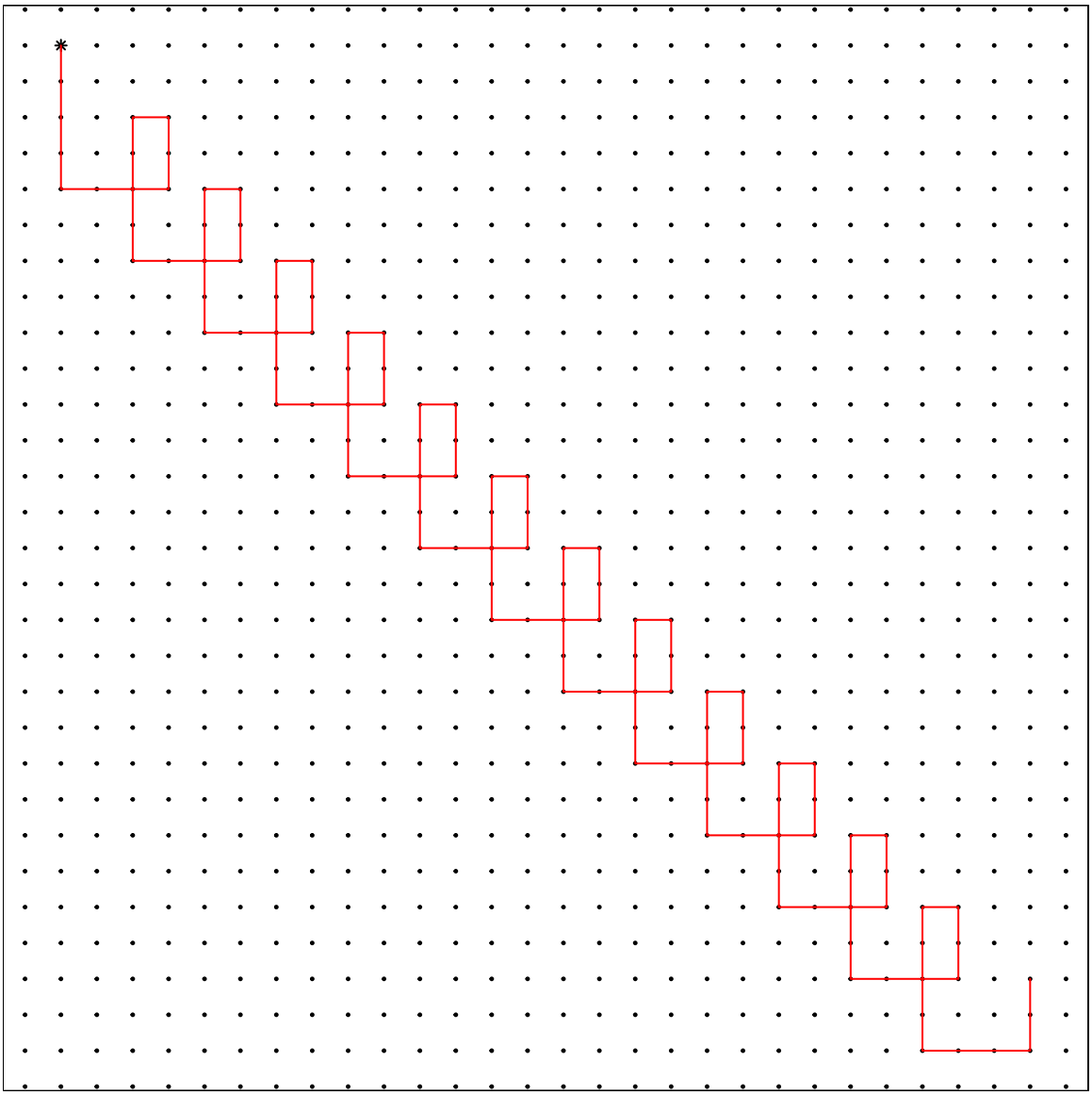
Name: Date:

## Grid Countdown Spirals

Follow the teacher! Use a ruler!

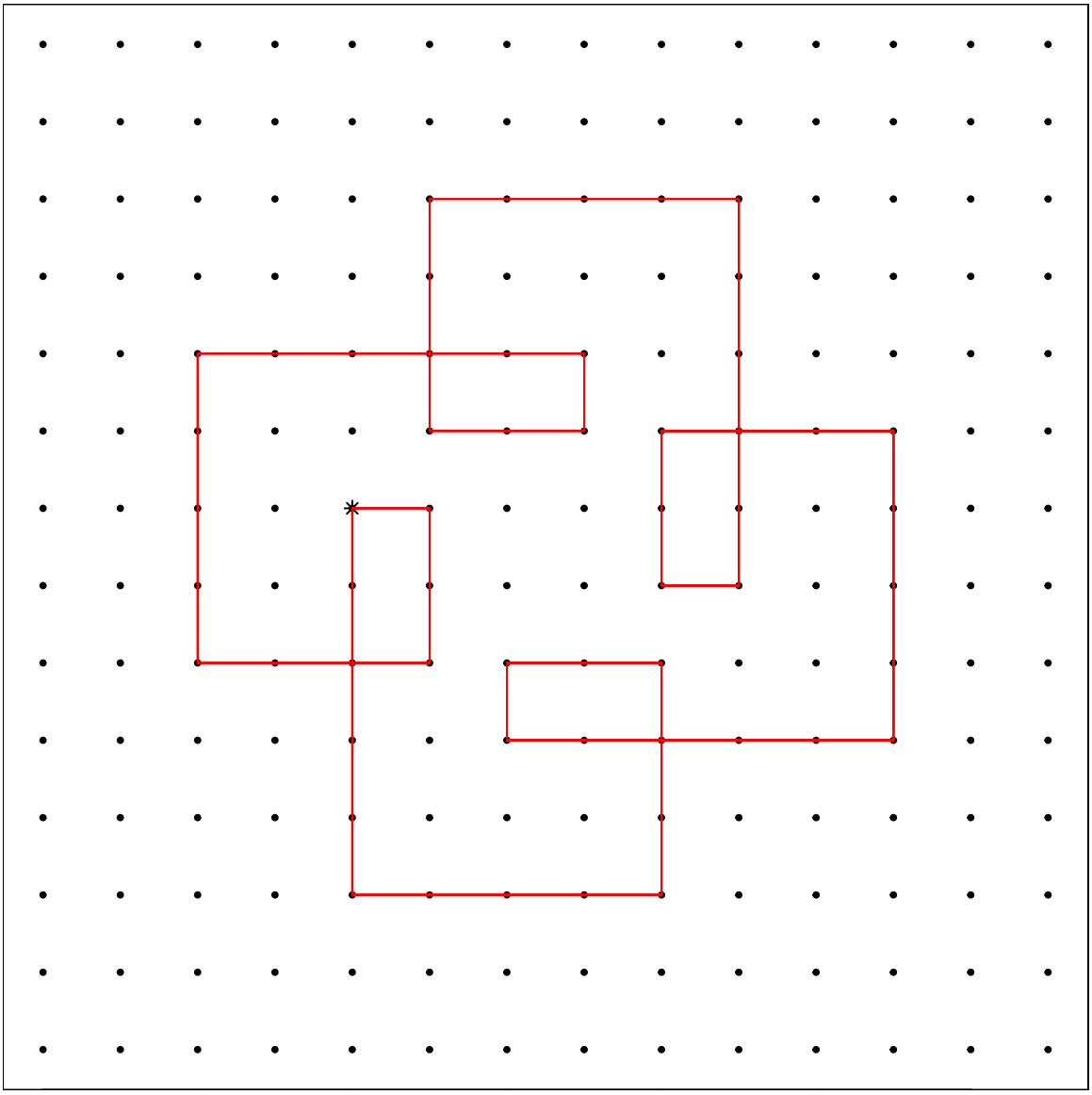
1. Start at the star.
2. Go down 4 units.
3. Go right 3 units.
4. Go up 2 units.
5. Go left 1 unit.
6. Repeat steps 2 through 5... Notice a 90° turn counterclockwise after each segment.



- Describe the result:

This time, count down from 5. Remember… Down, Right, Up, Left!

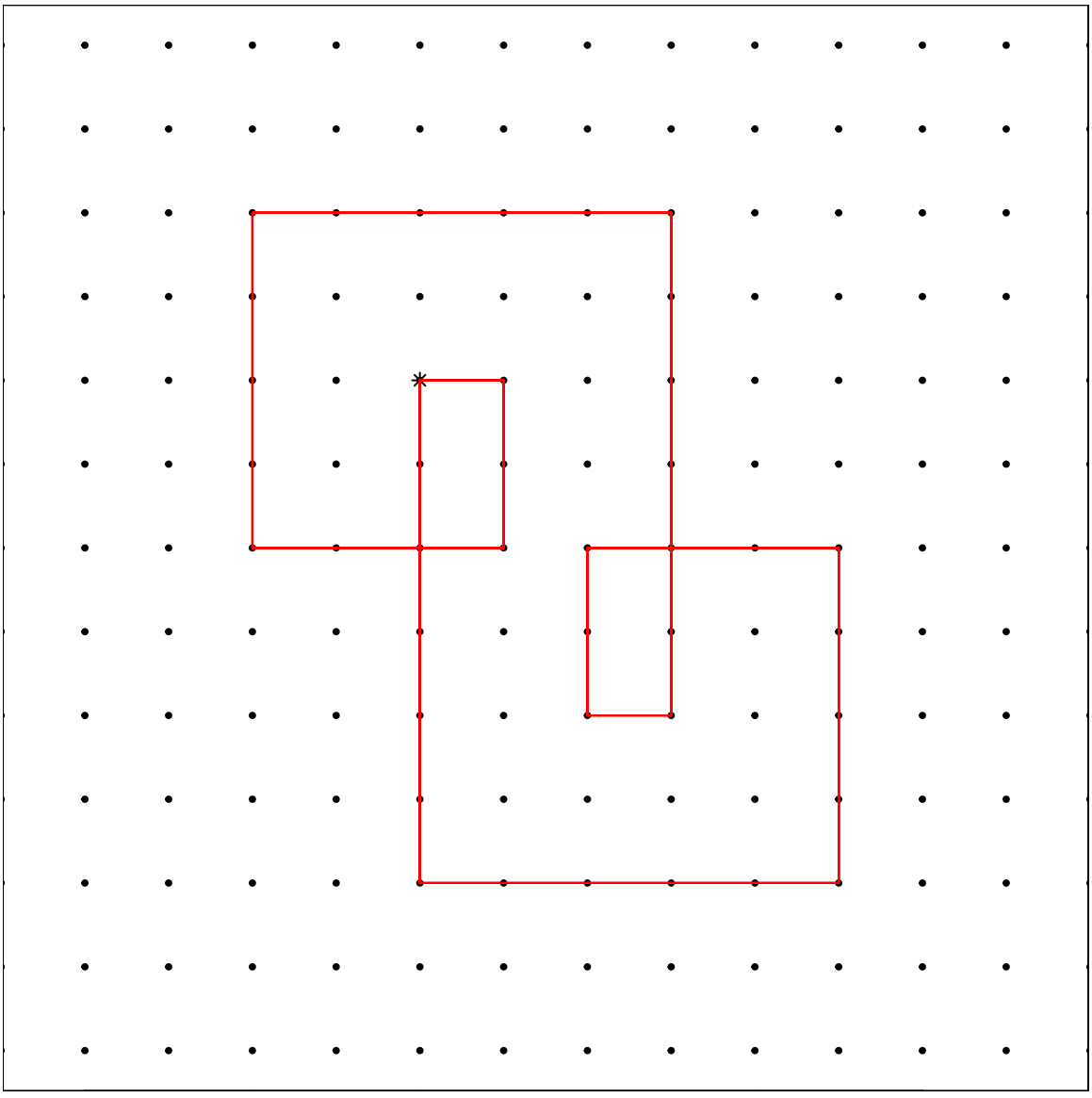
1. Start at the star, heading down.
2. Move 5 and then turn 90° counterclockwise.
3. Move 4 and then turn 90° counterclockwise.
4. Move 3 and then turn 90° counterclockwise.
5. Move 2 and then turn 90° counterclockwise.
6. Move 1 and then turn 90° counterclockwise.
7. Repeat steps 2 through 6.



- Describe the result:

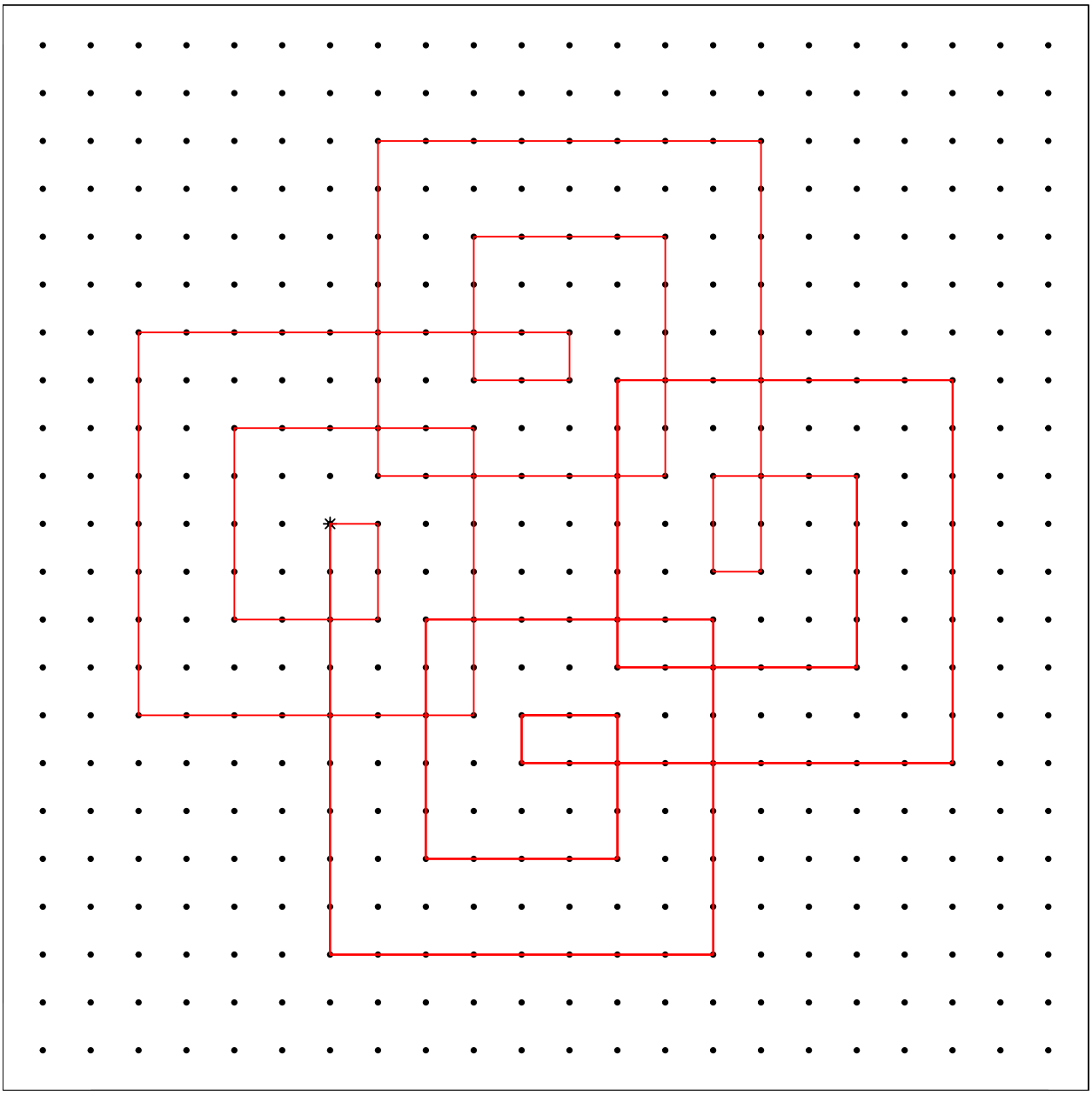
This time, count down from 6. Remember… Down, Right, Up, Left!

1. Start at the star, heading down.
2. Move 6 and then turn 90° counterclockwise.
3. Move 5 and then turn 90° counterclockwise.
4. Move 4 and then turn 90° counterclockwise.
5. Move 3 and then turn 90° counterclockwise.
6. Move 2 and then turn 90° counterclockwise.
7. Move 1 and then turn 90° counterclockwise.
8. Repeat steps 2 through 7.



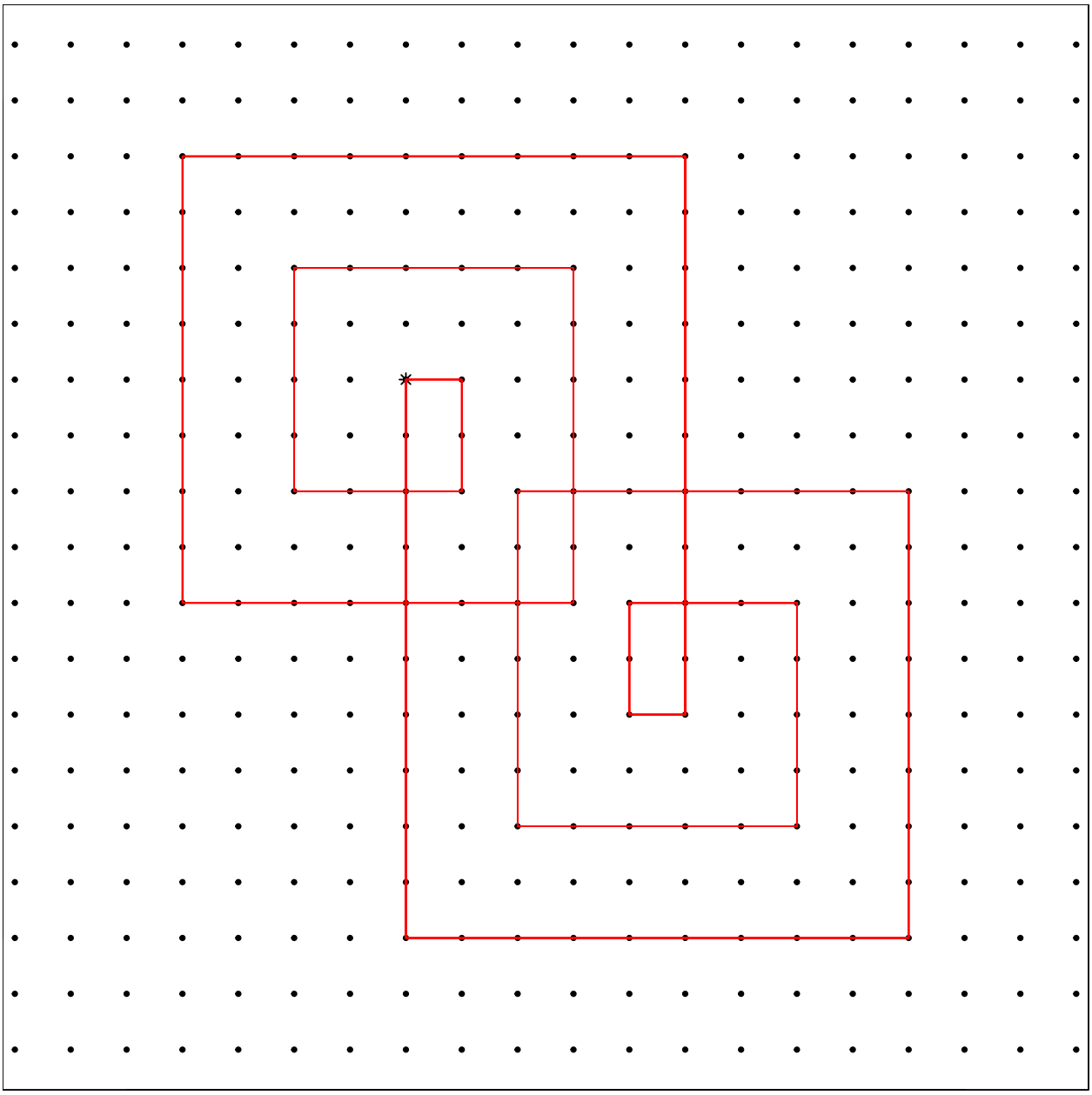
- Describe the result:

This time, count down from 9. (And still start at star heading down.) Remember... Down, Right, Up, Left!



- Describe the result:

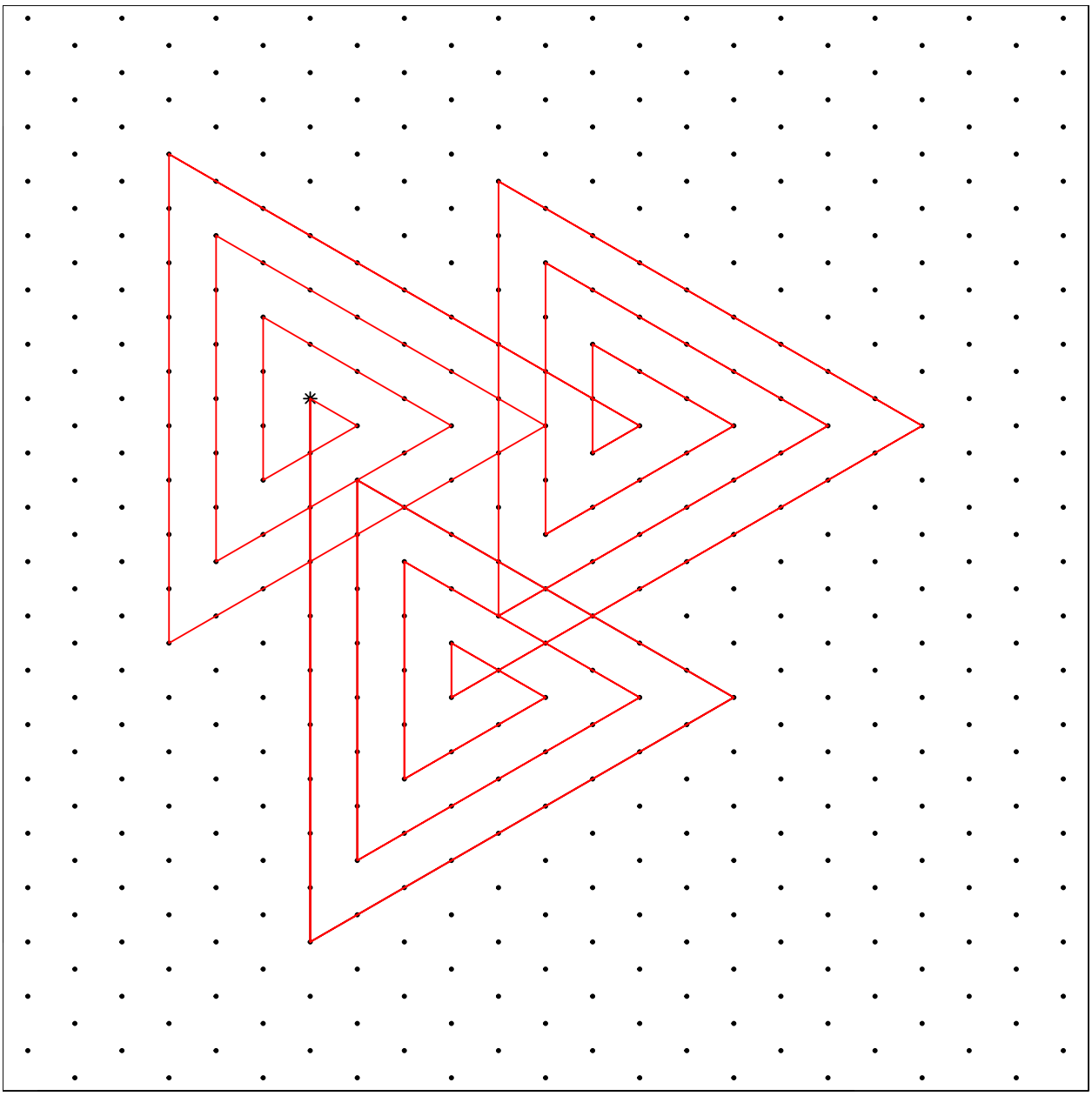
This time, count down from 10. (And still start at star heading down.) Remember... Down, Right, Up, Left!



- Describe the result:

This time, turn 120° counterclockwise after each segment. And count down from 10. (And still start at star heading down.) This time I've started the pattern for you.

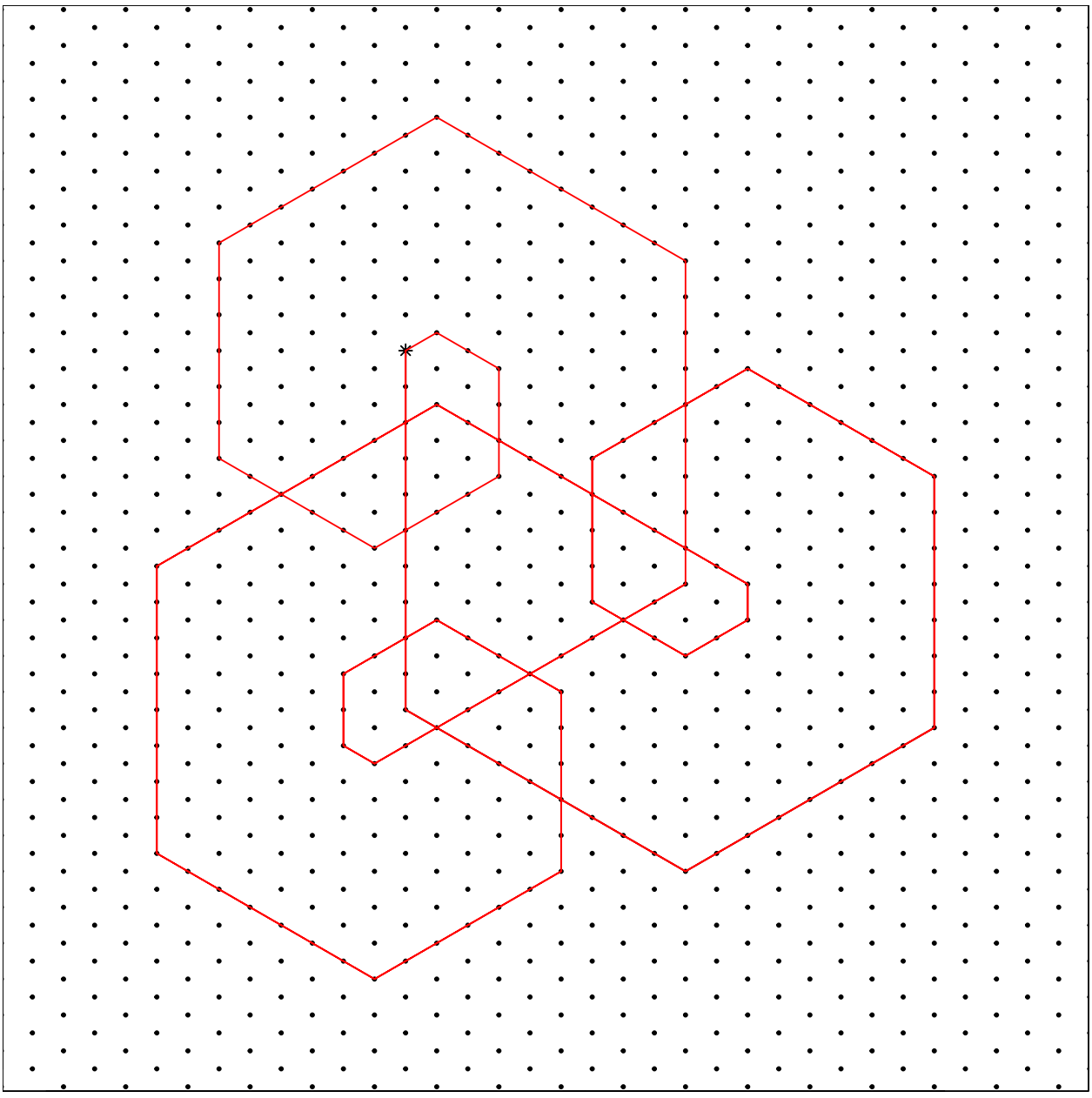
- The directions are: Down, Up-Right, Up-Left, Down, Up-Right, Up-Left...



- Describe the result:

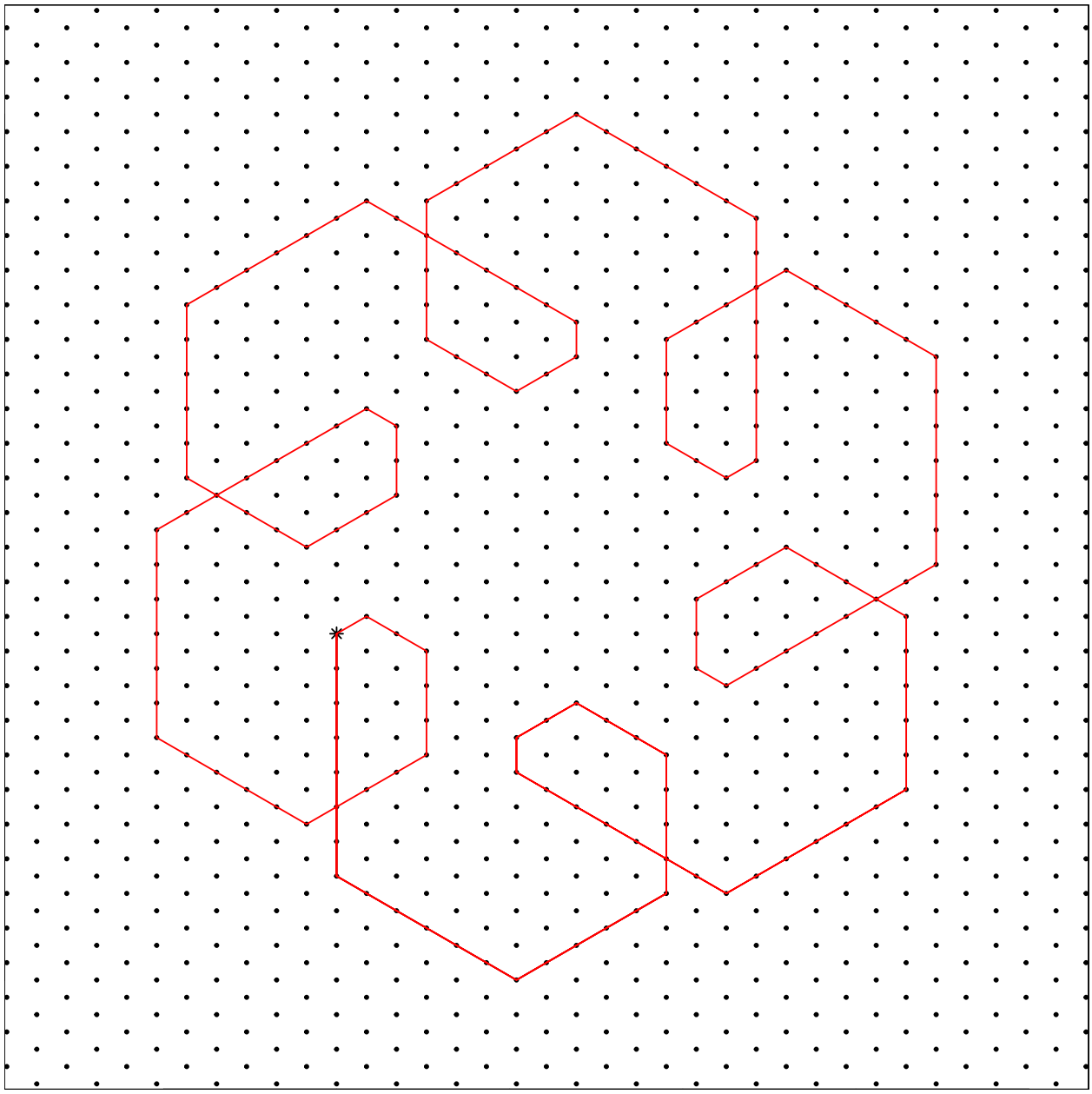
This time, turn 60° counterclockwise after each segment. And count down from 10. (And still start at star heading down.) This time I've started the pattern for you.

- The directions are: Down, Down-right, Up-right, Up, Up-left, Down-left...



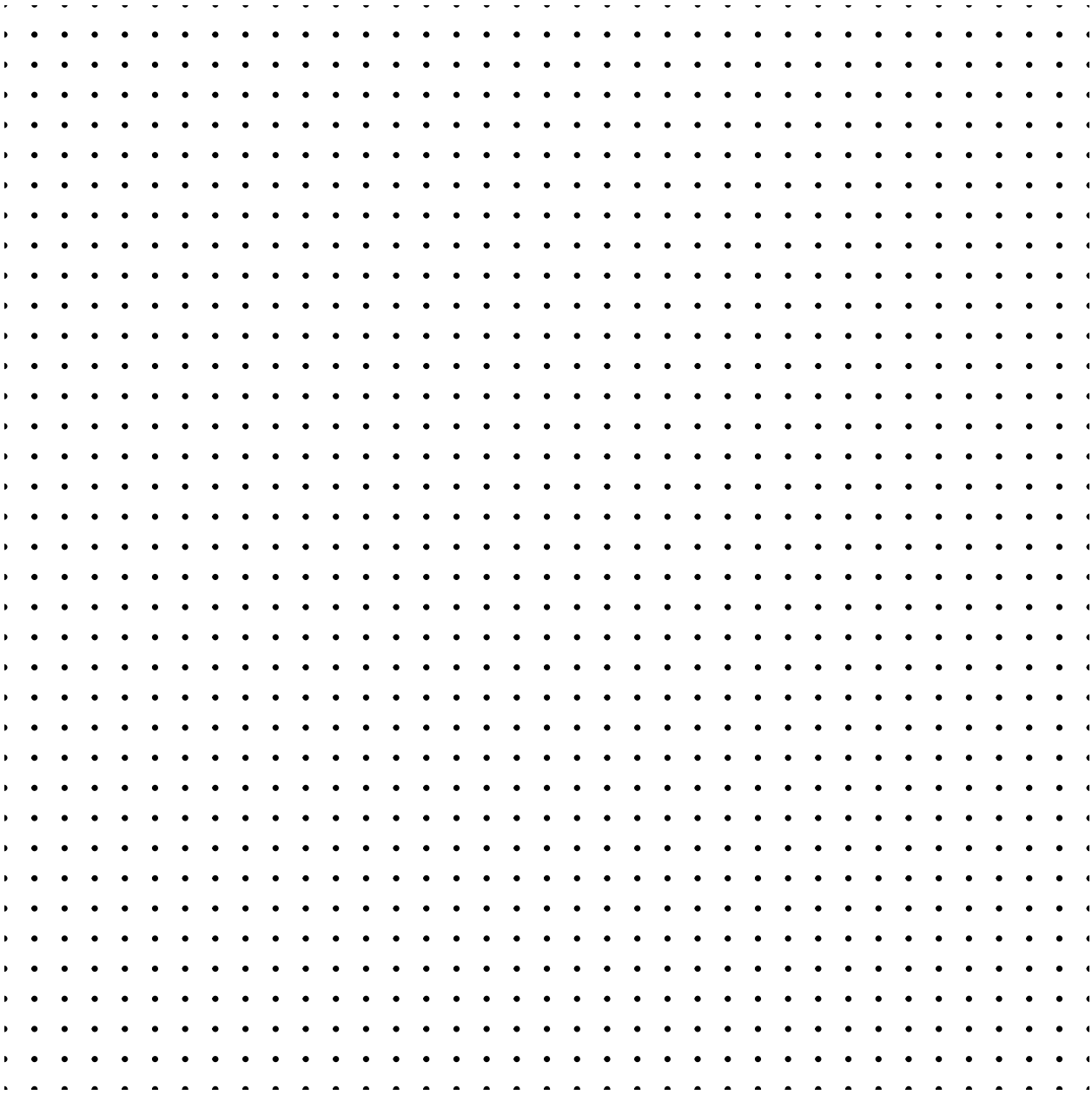
- Describe the result:

This time, turn 60° counterclockwise after each segment. And count down from 7. (And still start at star heading down.) This time I've started the pattern for you.



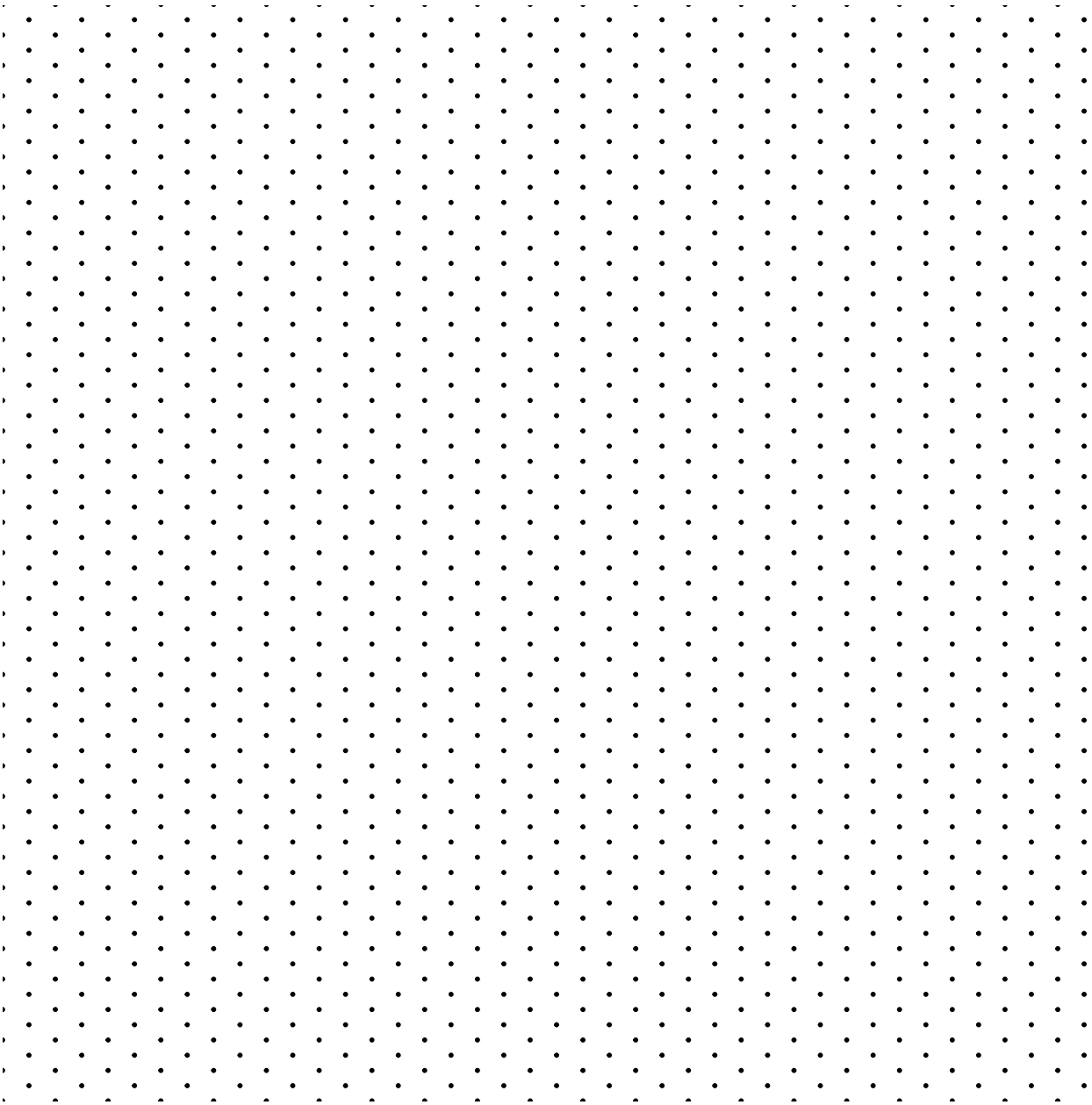
- Describe the result:

Design your own variations of the patterns shown above. Explain the algorithm used to generate the images!



Explain your algorithm:

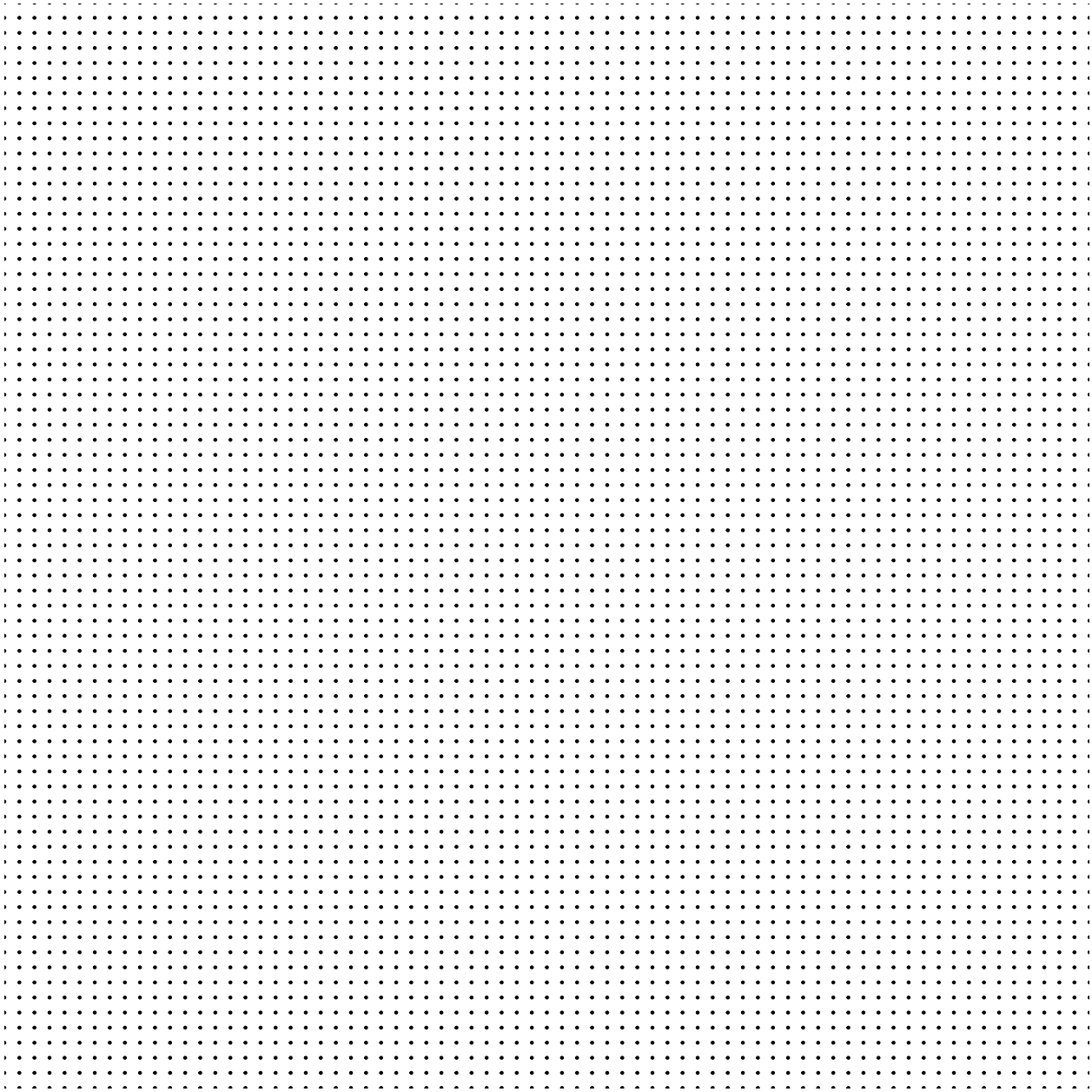
Design your own variations of the patterns shown above. Explain the algorithm used to generate the images!



Explain your algorithm:

- Describe the result:

Design your own variations of the patterns shown above. Explain the algorithm used to generate the images!



Explain your algorithm:

Design your own variations of the patterns shown above. Explain the algorithm used to generate the images!

Explain your algorithm: